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MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: CYTOKINE POLYPEPTIDES AND ANTIBODIES CONTAINING A SIGNAL SEQUENCE FOR THE ATTACHE-
MENT OF GLYCOSYLPHOSPHATIDYLINOSITOL

(57) Abstract: The invention relates to chimerical recombinant polypeptides, preferably therapeutic polypeptides, for example cy-
tokines or antibodies, which are engineered to include a signal sequence for the attachment of glycosylphosphatidylinositol; cells
expressing said polypeptides and methods to manufacture said polypeptides.

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A. CLASSIFICATION OF SUBJECT MATTER		
IPC 7	C12N15/19 A61K39/395	C12N15/62 C07K16/00
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		A61K38/19
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IPC 7 C12N C07K A61K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)		
EPO-Internal, WPI Data, PAJ, MEDLINE, BIOSIS, EMBASE, CHEM ABS Data, EMBL		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BENTING JUERGEN H ET AL: "N-glycans mediate the apical sorting of a GPI-anchored, raft-associated protein in Madin-Darby canine kidney cells" JOURNAL OF CELL BIOLOGY, vol. 146, no. 2, 26 July 1999 (1999-07-26), pages 313-320, XP002301129 ISSN: 0021-9525 abstract	1,2,6,7, 34-40
Y	----- -/--	3-5, 8-18, 25-33
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Mandl, B

INTERNATIONAL SEARCH REPORT

Application No

PCT/GB2004/001572

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DA COSTA CLIVE R ET AL: "Production of the thyrotrophin receptor extracellular domain as a glycosylphosphatidylinositol-anchored membrane protein and its interaction with thyrotrophin and autoantibodies" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 273, no. 19, 8 May 1998 (1998-05-08), pages 11874-11880, XP002246413 ISSN: 0021-9258 abstract figure 1	4,5
Y	WO 96/34105 A (FASEL NICOLAS JOSEPH ; REYMOND CHRISTOPHE DOMINIQUE (CH); RMF DICTAGEN) 31 October 1996 (1996-10-31) page 6, line 24 - line 31	3,30
Y	US 6 136 563 A (OLSON KENNETH ET AL) 24 October 2000 (2000-10-24) cited in the application column 4, line 17 - line 60	8-18
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Y	BROSTEDT P ET AL: "CHARACTERIZATION OF DIMERIC FORMS OF HUMAN PITUITARY GROWTH HORMONE BY BIOASSAY, RADIORECEPTOR ASSAY, AND RADIOIMMUNOASSAY" ACTA ENDOCRINOLOGICA, vol. 122, no. 2, 1 February 1990 (1990-02-01), pages 241-248, XP000618626 ISSN: 0001-5598 abstract; table 2	25-33
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INTERNATIONAL SEARCH REPORT

Application No.

PCT/GB2004/001572

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 03/017944 A (WAGNER THOMAS E ; WEI YANZHANG (US); GREENVILLE HOSPITAL SYSTEM (US)) 6 March 2003 (2003-03-06) page 3, line 2 - line 3 page 3, line 14 - line 16 page 3, line 23 - line 31 page 6, line 8 - line 24 page 8	1,2,6,7, 34-40
A	MEYERS R A (ED): "Molecular Biology and Biotechnology. A comprehensive desk reference , cytokines" MOLECULAR BIOLOGY AND BIOTECHNOLOGY: A COMPREHENSIVE DESK REFERENCE, 1995, pages 200-204,392, XP 002246550 page 200 - page 204 page 392	1,2
A	WO 01/96565 A (ARTYMIUK PETER ; ASTERION LTD (GB); ROSS RICHARD (GB); SAYERS JON (GB)) 20 December 2001 (2001-12-20) page 8, line 14 - line 15 page 9, line 10 - line 21	25-33

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claim 40 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-8 (partially), 9-18 (completely), 25-40 (partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8 (partially), 9-18 (completely), 25-40 (partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to growth hormone.

2. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to leptin.

3. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to erythropoietin.

4. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to prolactin.

5. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to TNF.

6. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to an interleukin.

7. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to G-CSF.

8. claims: 1-8, 25-40 (all partially)

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to GM-CSF.

9. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to CNTF.

10. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to cardiotrophin-1.

11. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to LIF.

12. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to oncostatin M.

13. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to interferon.

14. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to a cytokine not covered by subjects 1-13.

15. claims: 1 (partially), 19-24 (completely), 25-40 (partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to an antibody.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

16. claims: 1-8, 25-40 (all partially)

Subject-matter relating to a chimeric polypeptide which is engineered to include a domain for attachment of at least one glycosylphosphatidylinositol molecule to a polypeptide which is not a ligand binding domain of a cytokine receptor and which is not covered by subjects 1-15.

INTERNATIONAL SEARCH REPORT

Application No

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